

Remarks/Arguments:

This is a reply to the office action of December 21, 2007. The Applicants respectfully request that the Examiner reconsider this application in the light of the foregoing amendments and the following remarks.

AMENDMENTS

The specification has been amended for the purpose of correcting minor errors. Moreover, the metric units have been converted to inches. No new matter is added by the amendments to the specification.

CLAIM OBJECTION

The Examiner objected to Claim 1 because of the following informalities: at line 5, the term "resin" is misspelled as "rein". The "rein" in Claim 1 has been changed to --resin--. Accordingly, it is believed that the Examiner's objection is overcome.

REJECTION UNDER 35 USC 103(a)

The Examiner rejected Claim 1 under 35 U.S.C. 103(a) as being unpatentable over JP 2004-268406 [abstract] and U.S. Patent 5,460,873 (Ogawa et al.).

Applicants' claimed skin-integrated-foamed product for a vehicle seat, as set forth in amended Claim 1, comprises a skin and a layer of a first foamed resin material integrated with the skin. The skin has a double layer structure which is formed of a sheet of covering material having air-permeability, such as fabric, and a foamed slab made of a second foamed resin material including a polyester system, and laminated on a back of the covering sheet as a layer of wadding material. The foamed slab has a

fine cell structure, the number of whose cells is 80-90 per inch, and has air-permeability ranging from 10cc/cm²/sec to 15cc/cm²/sec. In the product, a portion of the first foamed resin material is impregnated into the foamed slab and forms a foamed resin-impregnated layer within the foamed slab, so that the skin and the layer of the first foamed resin material are integrated with each other.

In explaining the reasons for this rejection, the Examiner indicated that JP'406 relates to a skin material for integrating foam molding making it possible to prevent the permeation of a foamable raw solution without using a barrier layer such as a resin film or the like to achieve the simplification of a manufacturing process and the reduction of cost, which is hard to be steamed because of proper moisture permeability and improved in touch, and a skin integrated foamed molded product. The Examiner further indicated that the skin material for skin integrating foam molding is constituted by integrating a skin with a liquid resin impermeable polyurethane sheet which is characterized in that air permeability is 5 cc/cm²/sec or below and a plurality of micropores are made in cell film (foam layer).

At page 3 of the Office Action, the Examiner took Official notice "that forming a foam layer for a skin material with a polyester polyol polyurethane is common and well known.". Not ourselves knowing whether this is true, we respectively traverse the taking of Official notice in this instance, in accordance with MPEP 2144.03(c). Citation of a reference in support of the assertion will be appreciated.

The Examiner also stated that the claimed cell density in claim 1 "is deemed to [be] an obvious routine optimization to one skilled in the art, motivated by the desire to prevent substantial permeation of the foamable raw material into the skin material.". In the Applicants' claimed skin-integrated-foamed product as set forth in amended Claim 1, the foamed slab has the fine cell structure, the number of whose cells is 80-90 per inch, and has air-permeability ranging from 10cc/cm²/sec to 15cc/cm²/sec.

The inventors zealously investigated and, as a result, have found that, by setting of the cell density of the foamed slab to 80-90 per inch and setting of the air-permeability of the foamed slab to a range from 10cc/cm²/sec to 15cc/cm²/sec, it is possible to provide the product in which even if impregnation of the foamed resin material into the wadding material is progressed to a certain degree, a surface of the product feels soft or tender to the touch and which can provide a good sitting feeling to the user and can be positively prevented from becoming considerably stuffy.

As the Examiner commented, JP '406 is silent about a workable number of fine cells per area. Moreover, in the JP '406, the air permeability of the liquid resin impermeable polyurethane sheet is limited to 5cc/cm²/sec or below. That is well outside the presently claimed range of 10cc/cm²/sec to 15cc/cm²/sec. As discussed above, a combination of the setting of the cell density of the foamed slab to 80-90 per inch and the setting of the air-permeability of the foamed slab to a range from 10cc/cm²/sec to 15cc/cm²/sec allows the product having such good properties as stated above to be provided. The JP '406 does not teach and/or suggest the Applicants' product.

For the above reasons, we respectfully submit that JP '406 does not render the invention of amended claim 1 obvious.

Turning to Ogawa et al., that reference does not suggest a linear cell density within the range recited in claim 1. Actually, the only cell population densities mentioned are at the top of column 3: from 20,000 to 70,000 cells per cm². That is well outside the presently claimed range of 80-90 per inch. In addition, Ogawa does not suggest air permeability within the range recited in claim 1. Ogawa does not teach and/or suggest the Applicants' product. Again, the "Official notice" taken by the Examiner is traversed, inasmuch as it is not known to us whether it is common and well known to form a foam layer for a skin material with a polyester polyol polyurethane. We agree with the Examiner that substitution of one material for another is generally obvious;

however, we do not agree that the reference would have motivated a person of ordinary skill in this art to optimize cell population density to within the range claimed. In general, Ogawa suffers the same shortcomings as does JP '406, and does not render the invention of claim 1 obvious.

DOUBLE PATENTING

Claim 1 is also rejected on obvious-type double patenting grounds. To obviate this rejection, we enclose a terminal disclaimer with respect to copending application No. 10/596,810.

CONCLUSION

For all of the foregoing reasons, it is believed that claim 1 and new claims 2 and 3 depending from claim 1 either directly or indirectly are patentable over the prior art of record, and that this application is in condition for allowance. The Applicants respectfully request that the Examiner reconsider the application in the light of the foregoing amendments and remarks.

Respectfully submitted,

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